BS in Computer Science

Florida Poly Experience Sequence

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
EGN 1006 Career Design for STEM Disciplines (1)	EGN 1007 Concepts and Methods for Eng. & CS (1)	COP 2080 Computation Problem Solving in Python (2)	COP 3415 Data Structures (3)	CEN 3820 System Analysis and Design	CEN 4033 Secure Software Engineering (3)	COP 4934 Senior Design 1 (3)	COP 4935 Senior Design 2 (3)
IDS 1380 Foundational Lessons in App of Mathematics (3)	IDS 1721 Computing & Problem Solving for STEM (3)	COP 3337 Object Oriented Programming (3)	CDA 2108 Fundamentals of Computer Systems (3)	CNT 3004 Computer Networks & Communication (3)	CDA 3100 Computer Architecture (3)	COP 4610 Operating Systems Concepts (3)	COP 4020 Programming Languages (3)
MAC 2311 Analytic Geometry and Calculus 1 (4)	MAC 2312 Analytic Geometry and Calculus 2 (4)	MAD 2104 Discrete Math (3)	COP 3710 Database 1 (3)	COP 4531 Algorithm Design & Analysis (3)	COT 4210 Formal Languages & Automata (3)	Computer Science Concentration Elective (3)	Computer Science Concentration Elective (3)
CHM 2045 (3)	PHY 2048 Physics 1 (3)	PHY 2049 or CHM 2046 or EVR 1001 (3)	MAS 3114 Computational Linear Algebra (3)	CAP 4612 Machine Learning (3)	Computer Science Concentration Elective (3)	Computer Science Elective (3)	Computer Science Elective (3)
CHM 2045L (1)	PHY 2048L Physics 1 Lab (1)	PHY 2049L or CHM 2046L or EVR1001L (1)	STA 2023 Statistics 1 (3)	Computer Science Concentration Elective (3)	Arts & Humanities or Social Science Gen. Ed: History (3)	Required Social Science Gen. Ed. (3)	Required Arts and Humanities Gen. Ed. (3)
ENC 1101 English Composition 1 (3,W)	ENC 2210 Technical Writing (3,W)	IDS 2144 Legal, Ethical, and Mgmt Issues in Tech. (3)			IDS 4941 Professional Exp. Internship (0)		

Prerequisite note: IB or C in MAC 1147 or higher, AP for MAC 2311

Legend:
- Course Prefix & Number | Credits | Course Name
- General Education Elective | Credits
- Program or Concentration Elective | Credits
- C grade or better is required

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Program/Concentration Electives

Advanced Topics

For students who like to explore, the Advanced Topics concentration enables you to choose up to twelve hours from electives or other concentration courses to fill out your program.

Artificial Intelligence

- CAP 4630 - Artificial Intelligence Credits: 3
- CAP 4613 - Applied Deep Learning Credits: 3
- CAP 4410 - Computer Vision Credits: 3
- CAI 4304 - Natural Language Processing Credits: 3

Big Data Analytics

- COP 3729 - Database 2 Credits: 3
- CAP 4770 - Data Mining & Text Mining Credits: 3

And 2 of the following courses:

- CAP 4786 - Topics in Big Data Analytics Credits: 3
- CAP 3774 - Data Warehousing Credits: 3
- CAP 4410 - Computer Vision Credits: 3
- CAP 4613 - Applied Deep Learning Credits: 3

Game Development & Simulation

- CAP 4730 - Computer Graphics Credits: 3
- CAP 4034 - Computer Animation Credits: 3
- CAP 4052 - Game Design and Development 1 Credits: 3
- CAP 4056 - Game Design and Development 2 Credits: 3

Information Assurance and Cyber Security

- CIS 4362 - Applied Cryptography Credits: 3
- CIS 4367 - Computer Security Credits: 3
- CIS 4204 - Ethical Hacking Credits: 3
- CIS 4203 - Digital Forensics Credits: 3

Software Engineering

- CEN 4073 - Software Requirements Engineering Credits: 3
- CEN 4065 - Software Design and Architecture Credits: 3
- CEN 4072 - Software Verification and Quality Assurance Credits: 3
- CEN 4722 - User Interface and User Experience Credits: 3

Program/Concentration Electives

CEN 4088 - Software Security Testing Credits: 3
CAP 4122 - Virtual Reality Credits: 3
CEN 4213 - Embedded Systems Programming Credits: 3
CIS 4369 - Web Application Security Credits: 3
CNT 4409 - Network Security Credits: 3
CAP 4410 - Computer Vision Credits: 3
CNT 4526 - Wireless and Mobile Networking Credits: 3
COP 4620 - Compilers and Interpreters Credits: 3
COP 4656 - Mobile Device Applications Credits: 3
EEL 4660 - Autonomous Robotic Systems Credits: 3
CEN 4721 - Human Computer Interaction Credits: 3
CAP 4830 - Modeling and Simulation Credits: 3
COP 4930 - Special Topics Credits: 1-3
CAP 4613 - Applied Deep Learning Credits: 3
MAD 3401 - Numerical Analysis Credits: 3
MAP 2302 - Differential Equations Credits: 3
HIM 3514 - Health Systems Modeling and Optimization Credits: 3
CAP 4630 - Artificial Intelligence Credits: 3
DIG 2520 - Digital Media Production Credits: 3
COP 3604 - System Administration using UNIX Credits: 3
COP 3809 - Advanced Topics in Programming Credits: 3
COP 3834 - Web Application Development Credits: 3
Any Computer Science concentration course outside of a pursued concentration.

General Education

Arts & Humanities

Program Required:

- IDS 2144 Legal, Ethical, and Management Issues in Technology

At least one course (3 credits) from the following state required list:

- ARH 2000 Art Appreciation (W)
- HUM 2020 Introduction to the Humanities (W)
- LIT 2000 Introduction to Literature
- PHI 2010 Introduction to Philosophy (W)
- MUL 2010 Music Appreciation

Optional additional course electives:

- HUM 2022 Explorations in Humanities (W)

Social Sciences

At least one course (3 credits) from the following state required list:

- AMH 2010 - American History to 1877 Credits: 3 (Fulfills Civic Literacy Requirement)
- AMH 2020 - American History Since 1877 Credits: 3 (Fulfills Civic Literacy Requirement)
- ECO 2013 - Principles of Macroeconomics Credits: 3
- POS 2041 - American Government Credits: 3 (Fulfills Civic Literacy Requirement)
- PSY 2012 - General Psychology Credits: 3

Optional additional course electives:

- ECO 2023 - Principles of Microeconomics Credits: 3

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